

09 Nov 2010

To: CHSTP Regional Managers, Regional Consultant Project Managers

Fr: Ken Jong, CHSTP Engineering Manager

Re: Notice to Designer (NTD) No. 002 – Guidance on Functional Station Design to Support the Environmental Documents

### Purpose

The purpose of this memorandum is to direct the Regional Consultants how to incorporate functional and iconic station images into the environmental document such that there is a consistent approach across the Program. The environmental documents are to include images of a functional station as well as an iconic station for a representative site for each station. This will present a range of what the station may look like depending on whether the local agencies choose to partner with the Authority for a station with a increased architectural statement than a functional station. While the CHSTP stations will be designed and constructed to meet the functional requirements, the Authority supports that local agencies enter into development and financial partnerships with the Authority to create a statement piece for the station and the area it serves.

This memorandum augments guidelines presented in TM 2.2.2 Station Program Design Guidelines and TM 2.2.5 High-Speed Train Station Descriptions. TM 2.2.2 provides guidance to assist Regional Consultants in developing station designs that satisfy functional, operational, relational, spatial and statutory requirements. TM 2.2.5 provides a preliminary, system-wide visual description of HST stations and establishes design parameters for station purpose, context, presence and image.

The principal objectives of the 15% station design are to identify a station site “footprint”, confirm feasibility of the design and construction of HST stations, and develop capital cost estimates for each potential station location in support of the environmental review process. The 15% design is intended to satisfy the station planning guidance provided in the technical memoranda rather than presenting a specific architectural solution. This memorandum provides graphic illustrations to assist Regional Consultants in conveying a “functional” level of architectural detail expected for a representative HST station.

### Functional Stations

Two views of a representative functional CHSTP station design are included in Figure 1 and 2. These images can be used by the Regional Consultants as an example to create an architectural look for a functional station for their section’s environmental document. The features found in the representative functional station should be translated and incorporated into the section specific stations visualizations. Although, ultimately the local agencies will be involved in the process to design the station, there is a need at this time to show what a functional station might look like. Functional stations satisfy the functional requirements of the high-speed train system and enclose the station in a unique but architecturally reserved skin. Functional stations will satisfy the CHSTP’s goal of design excellence while recognizing the importance of the context of a station site. Exterior subtlety combined with striking interior spaces are highlights of functional stations. Additional examples of “functional” station design at high-speed train stations throughout Asia and Europe are included in Appendix A.



Figure 1- Birds Eye View of Functional Station and Platform



Figure 2- View of Functional Station Front Entrance

### Iconic Stations

As an alternative to functional station design, local agencies desiring a more dynamic and impactful level of architectural design may choose to partner with the Authority in developing “iconic” station architecture. An iconic version of each station must be incorporated into the environmental document’s visualizations in addition to the functional station. Iconic stations, like functional stations, satisfy all HST functional requirements. The iconic character is not necessarily a response to large ridership or high-profile locations; any station locale may consider iconic station design. Iconic stations may be characterized by a sense of prominence

on the site, architectural expressiveness, exhilarating passenger experience, organic or curvilinear forms, unique detailing and/or uncommonly rich materials. A representative example for an iconic station is not provided in this memo; however, illustrations of iconic high-speed rail station designs are presented in Appendix B. These illustrations, along with any input already received from the local stakeholders, should be used to guide the development of a iconic station alternative.

#### Subsequent Architectural Station Design

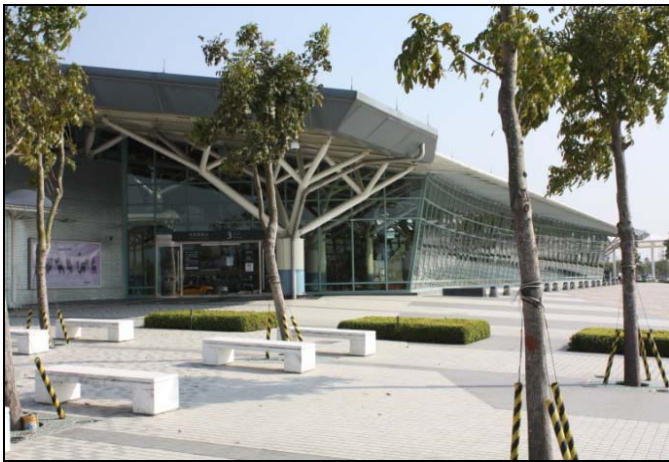
It is not the intent of the station design guidelines to prescribe a particular station style or image within a community; these factors will be investigated by the designers as specific responses to the unique design parameters identified for each station. A potential three-dimensional architectural station solution can be further developed during 30% design after a single site is selected and will be finalized during the project's final design phase.

Whether functional or iconic architecture is ultimately pursued, Regional Consultants will collaborate with community governments and stakeholders to develop design parameters for each station during 30% design, identifying station purpose, context, presence and image consistent with TM 2.2.5.



## Appendix A

### Functional High Speed Rail Station Examples





## Appendix B

### Iconic High Speed Rail Station Examples

